In re Patent Application of:
RAYNOR
Serial No. **10/786,878**
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In the Claims:

Claims 1-10 (Cancelled).

11. (Currently Amended) An image sensing structure comprising:

at least one photodiode comprising

a layer of a first conductivity type,

a well of a second conductivity type having opposing sides and positioned in said layer, said well defining a collection node, and

an isolation trench at least partially bounding an upper portion of said well at the opposing sides thereof.

12. (Previously Presented) An image sensing structure according to Claim 11, wherein said isolation trench completely bounds the upper portion of said well.

13. (Previously Presented) An image sensing structure according to Claim 11, wherein said isolation trench comprises a shallow trench isolation (STI).

14. (Previously Presented) An image sensing structure according to Claim 11, wherein said well comprises an N-well.

15. (Previously Presented) An image sensing structure according to Claim 11, wherein said layer comprises a P-well.

16. (Previously Presented) An image sensing structure according to Claim 11, wherein said layer comprises a P-type epitaxial layer.

17. (Previously Presented) An image sensing structure according to Claim 11, wherein an upper surface of said at least one photodiode is substantially defined by said isolation trench.

18. (Previously Presented) An image sensing structure according to Claim 16, wherein an n-p junction is formed at an interface between said isolation trench and said well.

19. (Previously Presented) An image sensing structure according to Claim 11, wherein a width of said at least one photodiode is less than or equal to 10 micrometers.

20. (Currently Amended) A CMOS image sensing structure comprising:

a semiconductor substrate; and

at least one photodiode in said semiconductor substrate and comprising

a layer of a P-type conductivity,

a well of an N-type conductivity type <u>having opposing sides and positioned</u> in said layer, said well defining a collection node, and

an isolation trench at least partially bounding an upper portion of said well <u>at the opposing sides thereof</u>.

21. (Previously Presented) An image sensing structure according to Claim 20, wherein said isolation trench completely bounds the upper portion of said well.

22. (Previously Presented) An image sensing structure according to Claim 20, wherein said isolation trench comprises a shallow trench isolation (STI).

23. (Previously Presented) An image sensing structure according to Claim 20, wherein said layer comprises an epitaxial layer.

24. (Previously Presented) An image sensing structure according to Claim 20, wherein an upper surface of said at least one photodiode is substantially defined by said isolation trench.

25. (Previously Presented) An image sensing structure according to Claim 23, wherein an n-p junction is formed at an interface between said isolation trench and said well.

26. (Previously Presented) An image sensing structure according to Claim 20, wherein a width of said at least one photodiode is less than or equal to 10 micrometers.

Claims 27-35 (Cancelled).